# Change: Natural... and Not

We often think of parks as outdoor museums. Caretaking a living ecosystem, however, is very different than protecting unchanging objects.

Both natural features *and* human facilities may be different each time you visit. Both are changing all the time. How we take care of those features and facilities may also affect your visit. You won't notice the ozone monitor that works 24 hours a day, but you will see other activities such as revegetation, road work, painting, or trail maintenance. Some activities may unavoidably affect you, such as smoke from a prescribed fire, campsite closures due to revegetation, or bear activity.

The park staff uses such actions as tools to maintain the landscape and protect its inhabitants and visitors. Your visit gives you but a snapshot of this process; Nature decides the timing of many of these actions. They all share one goal: preservation of these parks for us all, now *and* in the future.

## Fire: A Long-Lost Partner

Have you ever accused someone of something only to discover that you were wrong? In parks and forests nationwide, we have learned that an accused vandal is actually an important partner. That partner is fire.



Fire in the Sierra usually hugs the ground. Its low flames clear dangerous built-up fuels. Without it, these fuels would feed intense, hard-to-control wildfires. The natural burn pattern includes occasional hot spots. These leave important openings in the forest—the sunny, bare places where sequoia trees regenerate best.

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Years ago, we tried to banish fire from the landscape because we believed it was destructive. In sequoia groves, that meant putting out lightningcaused fires that naturally start as frequently as every 5 to 20 years.

As time passed, we saw unanticipated consequences for park resources. It turned out that fire suppression blocked important ecological processes and caused many problems. Two stand out:

First, sequoias were not reproducing. We learned that fires are critical to sequoia regeneration. They create a fertile ash seedbed and open the forest canopy, allowing sunlight to reach the seedlings.

Second, a vast accumulation of dead wood and small, dense white fir trees now increase wildland fire hazards. Natural fires used to burn away these excess fuels. Now, after fire's long absence, these fuels cause bigger blazes that are more dangerous for people, plants, and wildlife. They burn hotter and are harder to put out.

To protect human safety and benefit giant sequoia trees, the National Park Service has taken steps to end this misunderstanding about fire. For over 40 years at Sequoia and Kings Canyon, we have studied fire and its effects on the land. When and where it's appropriate, we ignite prescribed fires and allow lightning-caused fires to spread naturally and improve resource conditions.

We see strong evidence that working with this powerful natural partner is better than resisting it – we are successfully reducing fuels and stimulating sequoia growth with the help of fire.

Why is this important? The National Park System exists to conserve resources "unimpaired for the enjoyment of future generations." Early rangers thought that aggressive fire suppression met this goal. A more complete understanding of fire tells us that excluding this important natural partner only hurts what we are trying to protect.

#### WILDERNESS OVERNIGHTS

Each park trail has a daily entry quota for overnight trips. There is also a backcountry camping fee between mid-May and late September. These help to protect the wilderness environment and your experience. (Permits and fees are not required for park day hikes or for overnights in the US Forest Service Monarch and Jennie Lakes wildernesses.)

A permit is required for each solo or group. First-come, first-served permits can be issued the morning of your trip or after 1pm the day before at the park ranger station nearest your trailhead (see pages 8 & 9). If the quota for your desired trail is full, you can choose another trail or another day to start. Permits are not issued late in the day as minimum distances must be reached before you camp.

Permits on hold must be picked up between the afternoon before and 9am on day of departure. If delayed, call the ranger station or you may forfeit the permit on hold.

Camping in the park's "front-country" is permitted only in campgrounds; camping or sleeping in vehicles is not allowed in parking lots, pull-outs, picnic areas, or trailheads in the park.

Requests to put a permit on hold for a certain date are accepted beginning March 1 and at least 3 weeks before your trip's start date.

Wilderness Permit Reservations Sequoia & Kings Canyon N.P. 47050 Generals Highway #60 Three Rivers, CA 93271 1-559-565-3766 Fax 1-559-565-4239

Get a free copy of *Backcountry Basics* at visitor centers or by mail for details on wilderness, or see www. nps.gov/seki/bcinfo.htm.

# BACKCOUNTRY LODGES

- BEARPAW MEADOW CAMP (DNCPR) www.visitsequoia.com Reservations for next summer (required) taken starting January 2: 1-888-252-5757. Open mid-June to early September. This tent hotel is at 7800° on the High Sierra Trail, an 11-mile hike from Giant Forest.
- PEAR LAKE SKI HUT (SNHA)
   Overnight ski or snowshoe hut.

   See www.sequoiahistory.org

### Alien invaders!

Plants and animals here evolved together over time and keep each other in check. When species get brought in from other places, they may multiply wildly, since the competitors, predators and diseases they evolved with are not here. They break links in the local communities of life, badly disrupting species in that are dependent on each other. Sometimes they completely replace native plants and animals.

Practice alien hygiene! Look for seeds and tiny animals attached to shoes, clothes, waders, equipment, tires, and pet fur. Wash mud from under cars and on tires before coming into the parks. The natives will thank you!



Two immediate threats:

Star thistle: One of the most damaging non-natives in the state. Dense, thorny patches completely exclude native plants & limit wildlife movements. Not yet established here! If you recognize it from home or travels, make sure you don't bring it in.

New Zealand Mud Snails take over waterways that they invade by eating most of the food. Due to their biology, just one snail can start a huge population! They stick on gear; check boots & waders thoroughly for this tiny invader. Common just east of the parks. Could easily be carried into the High Sierra.

